

Patent [19]

[11] Patent Number: 2001009017

[45] Date of Patent: Jan. 16, 2001

[54] AIR CLEANING DEVICE

[21] Appl. No.: 11186406 JP11186406 JP

[22] Filed: Jun. 30, 1999

[51] Int. CL⁷ A61L00900 ; A61L00920; B01D05386

[57] ABSTRACT

PROBLEM TO BE SOLVED: To provide an air cleaning device which improves the activation of photocatalyst bodies and has a high air cleaning capability without a remarkable increase in wind pressure drop.

SOLUTION: The first photocatalyst bodies 4Ba and 4Bb are arranged along the inside surface of a pair of flat surfaces 4Aa and 4Ab of a flat wind tunnel 4A consisting of a wind shielding member which is an air introducing end at one end and an air discharge end at the other end and the plurality of second photocatalyst 4Ca and 4Cb are arranged apart from each other nearly perpendicularly to the first photocatalyst bodies 4Ba and 4Bb so as to partition the inside of the wind tunnel 4A. An electric discharge lamp 4Da which is turned back with an electric discharge path, has a pair of electrodes existing on one end side and generates light including the light of a wavelength below 400 nm is so disposed that the surface including of its turned back portion faces the second photocatalysts 4Ca and 4Cb. Further, a force air moving means for forcibly moving the air is disposed in the wind tunnel 4A.
